

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/029043 A2

(51) International Patent Classification⁷:

G01N

(21) International Application Number:

PCT/US2004/031831

(22) International Filing Date:

27 September 2004 (27.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/506,304 25 September 2003 (25.09.2003) US

(71) Applicant (*for all designated States except US*): SAGRES DISCOVERY, INC. [US/US]; P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): MENDEZ, Michael, J. [—/US]; c/o Sagres Discovery, Inc., P.O. Box 8097, Emeryville, CA 94662-8097 (US). BEHNKE, Craig [—/US]; c/o Sagres Discovery, Inc., P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(74) Agents: LAUNER, Charlene, A. et al.; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/029043 A2

(54) Title: RHO ANTIBODY AND TAG TO PURIFY CELL SURFACE PROTEINS

(57) Abstract: A process for the expression and purification of membrane associated proteins is provided. A process for the expression and purification of membrane proteins such as G-protein coupled receptors is provided. A hybrid polypeptide is constructed from a protein of interest and a peptide tag from the amino-terminus extracellular domain of rhodopsin. A method for purifying the hybrid protein using the rhodopsin tag is provided. Methods of detecting the expressed hybrid are also provided.